

# DM Issues



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# Issues

- Extracting Data for afterburners
- NULL columns in DB
- Datatypes
- Columns names in DB
- Unique IDs
- Filenames
- Coordinates

# Images Access

- Discussed in detail in afterburners talk
- Afterburners need to have all images for a given region of sky accessible.
- Overlap with needs of coadding.

# NULL columns in DB

- I recommend using a default value rather than a NULL for missing data. Numerical routines cannot work simply with a NULL. The default can be part of the column declaration.
- e.g. NOT NULL default -9999

# Datatypes in the DB

- Strongly recommend using standard data types such as float, double, int, smallint, and fixed length strings.
- Greatly simplifies working with the retrieved data. Using “Number” type is complicated because you have to parse the description to figure out what type it should be stored as in your programming language of choice.
- E.g. x,y are kept currently as Number(6,2), 6 fields of precision w/2 beyond decimal. Just store as a float. Storage space dominated by shapelet coefficients and images anyway....

# Column names in DB

- I recommend using standard names for common astronomical quantities, such as ra/dec rather than alpha\_j2000 etc.
- Also recommend using same names everywhere in all files and database to avoid confusion.
- Should make a list of names and post it, ask everyone to use them.

# Unique IDs

- How are ids generated?
- Should we generate IDs from metadata so that the ID for a given field, tile, object, etc. can be reproduced in a simple way from that metadata?

# Filenames

- Should label image, catalog flat files by the image id rather than ra,dec which are random numbers and non-unique in rounding process.
- Requires determining imageid before data is taken, or generating from meta data.



# Coordinates

- Should pick coordinate systems and stick to them.
- If using ra/dec it should be the standard ra,dec not remapped to some range. Otherwise call it something else.
- Same for x,y. If they are x,y in a remapped image they should be labelled as such.